

SPLIT-1

FEB 03 2016

DAS
13
9-89

Work Order ID 140559-1

140559

Page 1

Thursday, January 07, 2016 2:00:25 PM

Item ID: D4857-M Accept *N900040100* Setup Start *NS1*

Revision ID:

Item Name: Wiper Deflector Stop *NS2*

Start Date: 1/7/2016 Start Qty: 20.00 *20* 7x Cust Item ID:

Required Date: 1/7/2016 Req'd Qty: 20.00 *20* Customer:

Reference:

Approvals: Process Plan: MLS Date: JAN 07 2016 Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D4857	F
-------	---

100		0.00
-----	--	------

100

Purchasing

Purchasing

Memo

Issue P/O: 30938

Possible supplier: CARBON BY DESIGN

Manufacture as per dwg D4857-M

Prime Deflector as per dwg (SEE NOTE 4)

Certificate of Conformity release note is required.

0.00

DAS
13
9-89

JAN 08 2016

30938

110	Receive & Inspect for Damage & Mat'l Certs	0.00
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110

Packaging

Packaging

Memo

0.01

7x Split-02-02

Work Order ID 140559

140559

Page 2

Thursday, January 07, 2016 2:00:25 PM

Item ID: D4857-M Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Wiper Deflector
 Start Date: 1/7/2016 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 1/7/2016 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.01				(7)			DAS 38 9-89 FEB 02 2016
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <u>CK136A</u> Memo	0.00 0.00				7			DAS 6 9-89 FEB 03 2016
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.03				MCS			FEB 03 2016 MCS FEB 03 2016

Picklist Print

Page 1

Thursday, January 07, 2016 2:00:28 PM

Work Order ID: 140559

140559

Parent Item: D4857-M

D4857-M

Parent Item Name: Wiper Deflector

Start Date: 1/7/2016

Required Date: 1/7/2016

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A 14.05.21 NEW ISSUE DD VERF:JLM

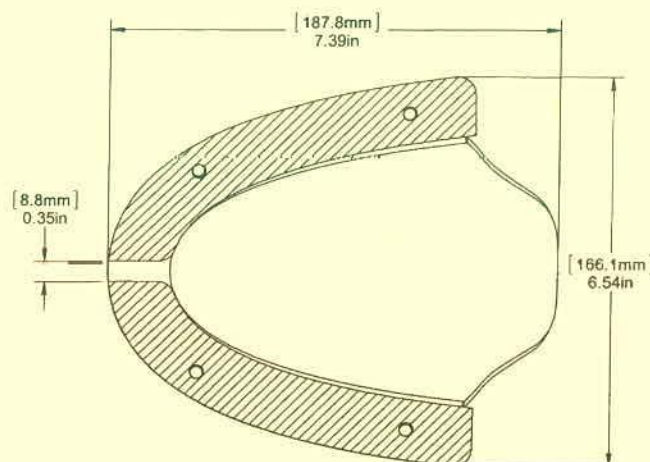
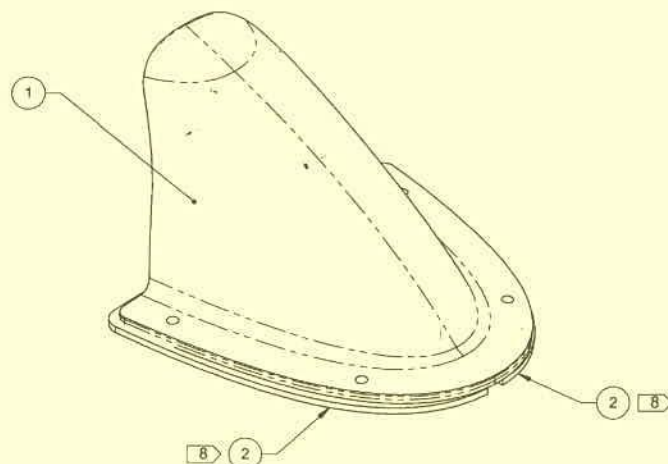
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4857-P		Purchased		No			Each	0.0000		20 ^{7X}			

D4857-P

Wiper Deflector

50/6-02-02

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4857-041	WIPER DEFLECTOR ASSY
1	1	D4857-1	WIPER DEFLECTOR
2	2	D4944-1	GASKET



D4857-041 WIPER DEFLECTOR ASSY $\triangle$

RELEASED

2015 JUN 08

ECN 15-582 *cm*

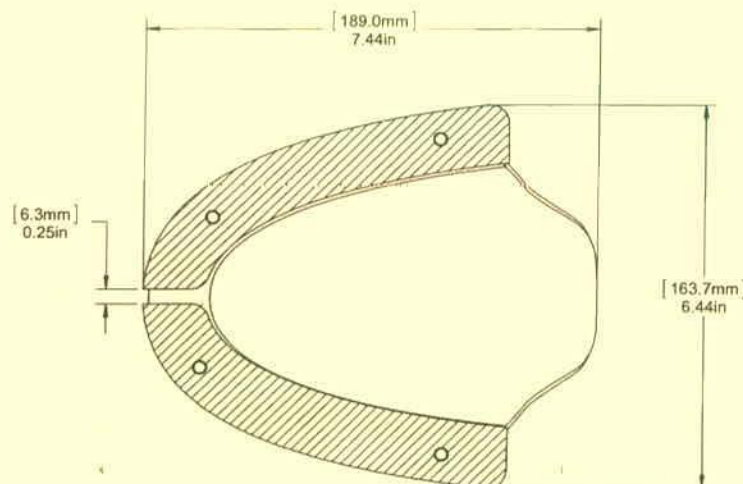
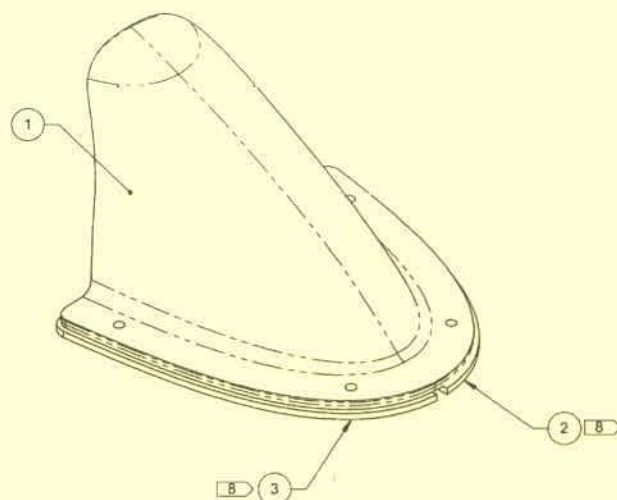
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N D4857-041, REVISION, BATCH NUMBER, AND DATE OF MANUFACTURE, AS PER QSI 044 METHOD 6.1
- 7) WEIGHT: 0.38 lbs (0.17 kg)
- 8) BOND D4944-1 GASKETS TO EDGE OF PART USING DOW CORNING 736 ADHESIVE

F	SHT 1 ADDED -041. ADDED D4857-2M (SHEET 8) AND RELABELED D4857-M TO D4857-1M (ZN B5-7). UPDATED D4757-044 (ZN B5-3). REVISED NOTES 1, 8 AND 10 (ZN A8-4, ZN A8-5, ZN A8-6, ZN A8-7, ZN A8-8). UPDATE PART WEIGHTS	AK / AJS	15.06.03
E	REVISE NOTE 6) (ZN A8-1, A8-2, A8-3); AND NOTE 8) (ZN A8-1, A8-2, A8-3)	AK	14.06.05
D	ADDED D4857-043 (ZN C7-1), D4857-044 (ZN C7-2), D4857-3 (ZN C7-4), D4857-4 (ZN C7-5) AND D4857-M (ZN C7-6)	AK	14.05.13
C	ADDED 4 MOUNTING HOLES	DW	13.12.09
B	REVISED BOM, DRAWING VIEWS, NOTES	PB	13.08.13
A	NEW RELEASE	DB	13.05.23
REV	DESCRIPTION	BY	DATE
DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	CP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4857	SHEET 1 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WIPER DEFLECTOR	NTS
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APPROVED

ITEM	QTY -043	P/N	DESCRIPTION
	X	D4857-043	WIPER DEFLECTOR ASSEMBLY, LH
1	1	D4857-3	WIPER DEFLECTOR LH
2	1	D5117-1	GASKET
3	1	D5117-3	GASKET



D4857-043 WIPER DEFLECTOR ASSEMBLY, LH

RELEASED

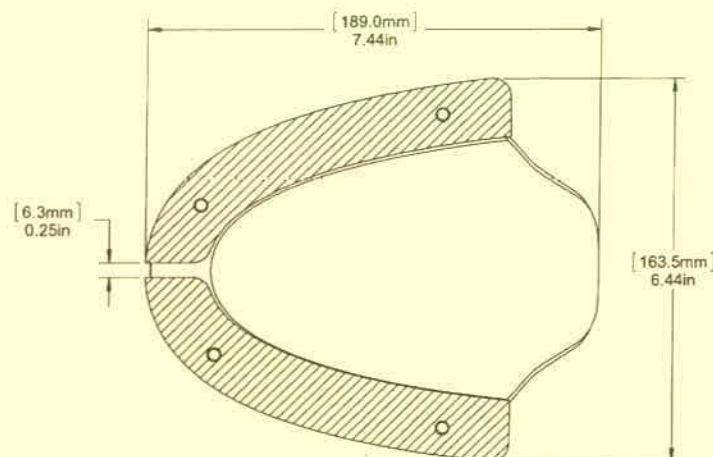
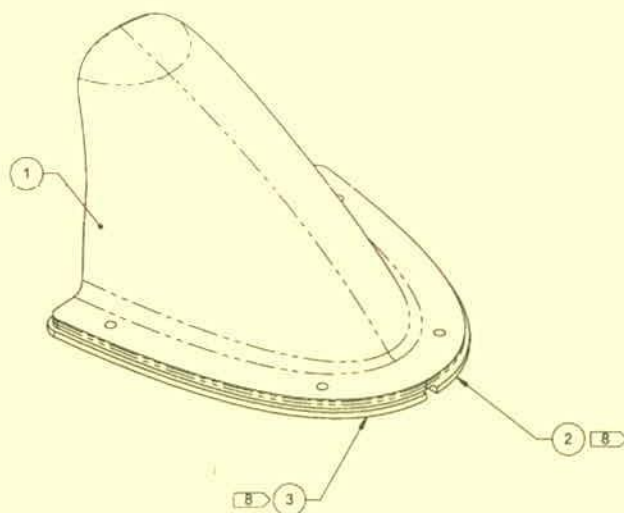
2015 JUN 08

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N D4857-043, REVISION, BATCH NUMBER, AND DATE OF MANUFACTURE, AS PER QSI 044 METHOD 6.1
- 7) WEIGHT: 0.38 lbs (0.17 kg)
- 8) BOND D5117-1/-3 GASKETS TO EDGE OF PART USING DOW CORNING 736 ADHESIVE

APPROVED	DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AJS		
	CHECKED	CP	DRAWING NO.	REV. F
	MFG. APPR.	DD	D4857	SHEET 2 OF 8
	APPROVED	WM	TITLE	SCALE
	DE APPR.	DS	WIPER DEFLECTOR	NTS
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ITEM	QTY -044	P/N	DESCRIPTION
	X	D4857-044	WIPER DEFLECTOR ASSEMBLY, RH
1	1	D4857-4	WIPER DEFLECTOR
2	1	D5117-5	GASKET
3	1	D5117-7	GASKET



D4857-044 WIPER DEFLECTOR ASSEMBLY, RH

RELEASED

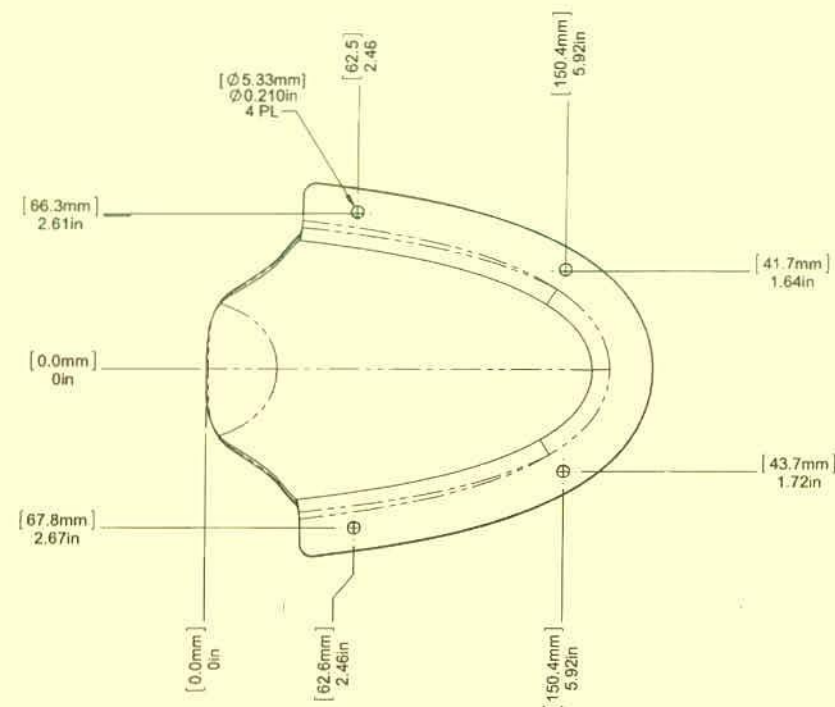
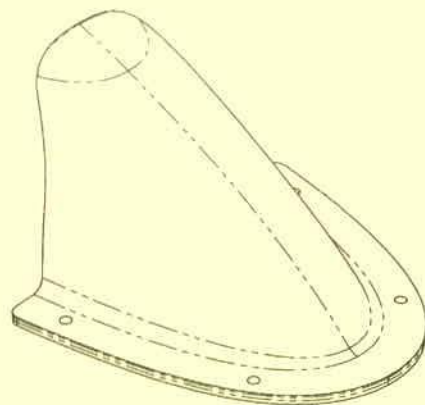
2015 JUN 08

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N D4857-044, REVISION, BATCH NUMBER, AND DATE OF MANUFACTURE, AS PER QSI 044 METHOD 6.1
- 7) WEIGHT: 0.38 lbs (0.17 kg)
- 8) BOND D5117-5/-7 GASKETS TO EDGE OF PART USING DOW CORNING 736 ADHESIVE

APPROVED

DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	CP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4857	SHEET 3 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WIPER DEFLECTOR	NTS
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D4857-1 WIPER DEFLECTOR

RELEASED

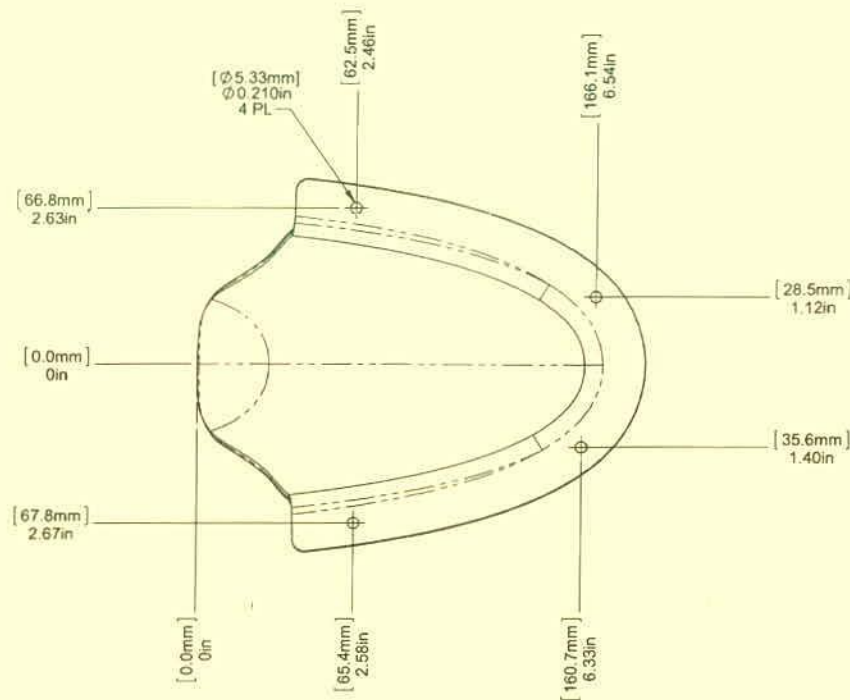
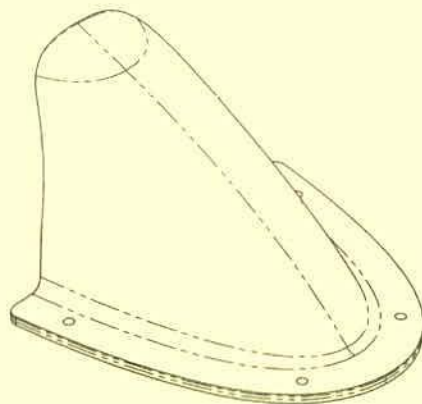
2015 JUN 08

NOTES:

- 1) MATERIAL: MADE FROM D4857-M
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.35 lbs (0.16 kg)
- 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE D4857-1-F.IGES

APPROVED

DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	CP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4857	SHEET 4 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	OS	WIPER DEFLECTOR	NTS
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D4857-3 WIPER DEFLECTOR, LH

RELEASED

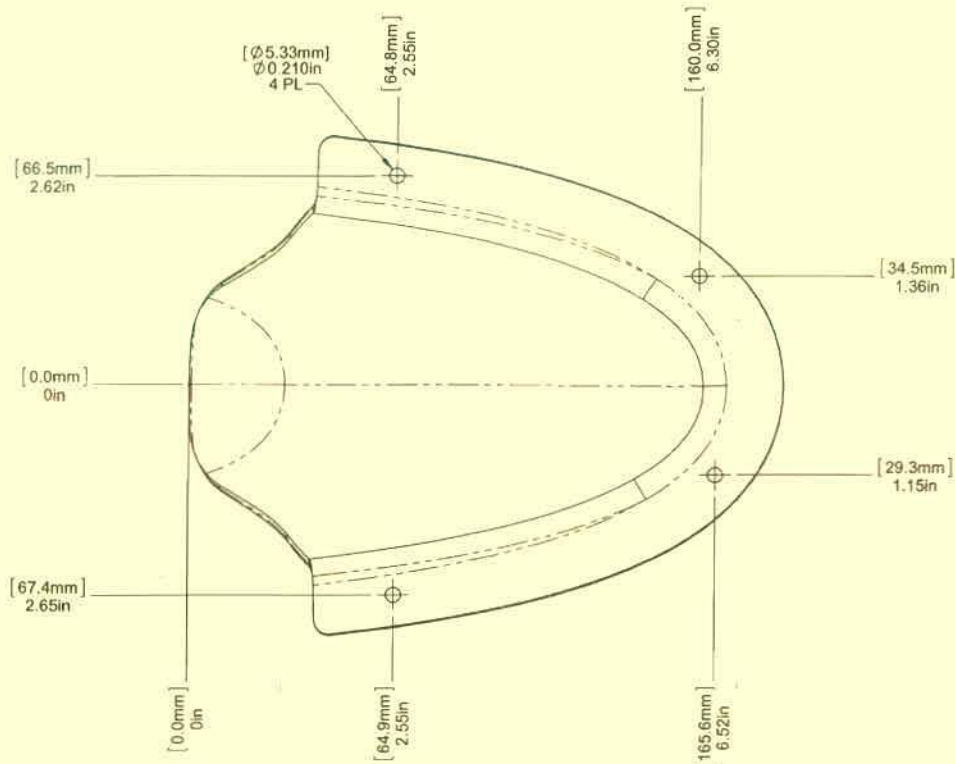
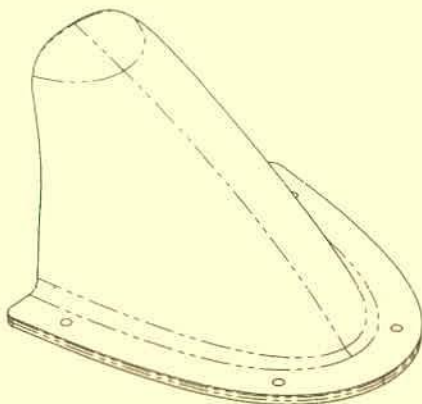
2015 JUN 08

NOTES:

- 1) MATERIAL: MADE FROM D4857-M
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.35 lbs (0.16 kg)
- 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE D4857-3-F.IGES

APPROVED

DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	CP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4857	SHEET 5 OF 8
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DE APPR.	DS	WIPER DEFLECTOR	NTS
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D4857-4 WIPER DEFLECTOR, RH

RELEASED

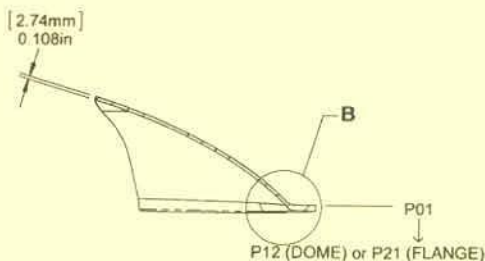
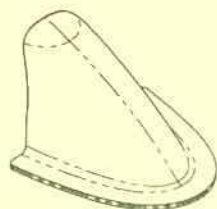
2015 JUN 08

NOTES:

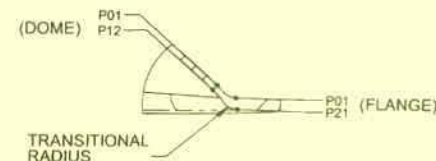
- 1) MATERIAL: MADE FROM D4857-M
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.35 lbs (0.16 kg)
- 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE D4857-4-F.IGES

APPROVED

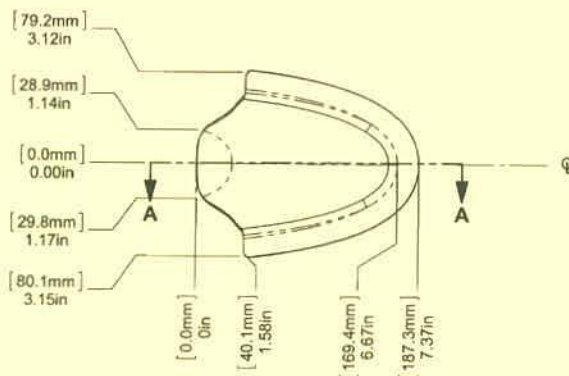
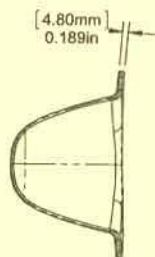
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DRAWN	AJS		
CHECKED	CP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4857	SHEET 6 OF 8
APPROVED	WM	TITLE	SCALE
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SECTION A-A



DETAIL B



D4857-M WIPER DEFLECTOR

RELEASED

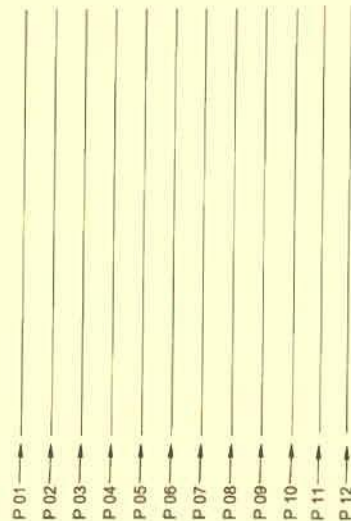
2015 JUN 08

NOTES:

- 1) MATERIAL: KEVLAR #285/353 4H SATIN, EPOXY PREPREG, 250°F CURE, 40% R/C
- 2) MATERIAL: CARBON FIBER PREPREG, ALDILA PREPREG SYSTEM 3K2X2-FR250-204/40 T300,
- 3) MATERIAL: ALDILA #120 E-GLASS AR250 WITH 48% RC;
- 4) FINISH: PRIMER IAW MIL-P-85582, 2-7 MIL MAX.
- 5) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 7) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 8) IDENTIFICATION: N/A
- 9) WEIGHT: 0.35 lbs (0.16 kg)
- 10) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE D4857-M-F.IGES
- 11) SEE SHEET 8 FOR LAYUP SCHEDULE. MANUFACTURE IAW MPP 145, CURE 250°F FOR 4 HOURS.

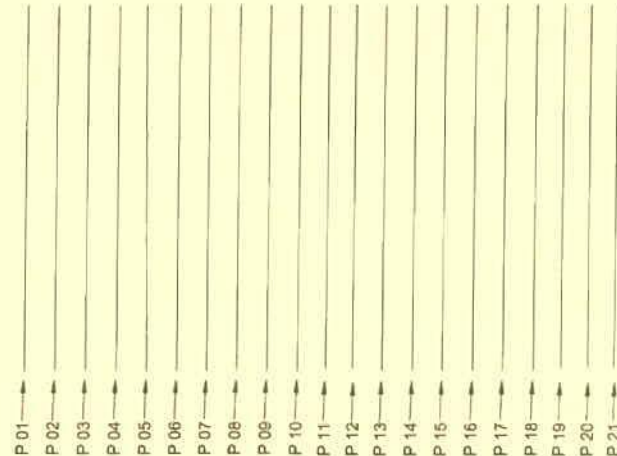
APPROVED

DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	CP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4857	SHEET 7 OF 8
APPROVED	WM	TITLE	SCALE
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LAYUP OF LAYERS (DOME)

LAMINATE - .108in (12 LAYERS)			
PLY	WARP ANGLE	MATERIAL	THICKNESS
01	90	[1]	.008-.010
02	0	[1]	.008-.010
03	90	[2]	.008-.010
04	0	[2]	.008-.010
05	90	[2]	.008-.010
06	0	[2]	.008-.010
07	90	[2]	.008-.010
08	0	[2]	.008-.010
09	90	[2]	.008-.010
10	0	[2]	.008-.010
11	90	[2]	.008-.010
12	0	[2]	.008-.010



LAYUP OF LAYERS (FLANGE)

LAMINATE - .189in (21 LAYERS)			
PLY	WARP ANGLE	MATERIAL	THICKNESS
01	90	[1]	.008-.010
02	0	[1]	.008-.010
03	90	[2]	.008-.010
04	0	[2]	.008-.010
05	90	[2]	.008-.010
06	0	[2]	.008-.010
07	90	[2]	.008-.010
08	0	[2]	.008-.010
09	90	[2]	.008-.010
10	0	[2]	.008-.010
11	90	[2]	.008-.010
12	0	[2]	.008-.010
13	90	[2]	.008-.010
14	0	[2]	.008-.010
15	90	[2]	.008-.010
16	0	[2]	.008-.010
17	90	[2]	.008-.010
18	0	[2]	.008-.010
19	90	[2]	.008-.010
20	0	[2]	.008-.010
21	90	[3]	.005

RELEASED
2015 JUN 08 *DL*

APPROVED

DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	CP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4857	SHEET 8 OF 8
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WIPER DEFLECTOR	NTS
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO30938**

Purchase Order Date 1/8/2016 12:51:31 PM

PO Print Date 1/8/2016

Page Number 1 of 2

Order From :

VU-CBD001

Ship To : DART AEROSPACE LTD

CARBON BY DESIGN
4128 AVENIDA DE LA PLATA
OCEANSIDE, CALIFORNIA 92056
USA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

Contact Name

Vendor Phone 760-643-1300

Ship To Contact

Ship To Phone

Ship Via: FedEx PI ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4857-P AS PER DWG D4857 REV. F B140559	Wiper Deflector	2/19/2016 Yes 2/19/2016	FN	20.00 Each	\$695.00	\$13,900.00
						Line Total:	\$13,900.00
2	71401-45	PROCUREMENT QUALITY CLAUSES	2/19/2016 No 2/19/2016		1.00	\$0.00	\$0.00
Procurement Quality Clauses A004 faa-pma/tso A005 right of entry A007 first article inspection (FAI) by seller (documentation maintained by supplier) A016 personnel qualification A025 certification of conformance A040 notification of quality escape A041 quality management A042 dart notification by supplier A043 retention of quality documents							

PO Instructions: Fedex Acc#151793240

Note:

1/8/2016



carbon by design

4128 Avenida De La Plata - Oceanside, CA 92056

Phone: 760-643-1300 Fax: 760-643-1333

www.carbonbydesign.com

Packaging List

Date: 1/31/2016

Packaging List No. 19119

Cage Code: 4DG17

CBD Work Order No. 9150

Customer PO No.: PO30938

Billing Address:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
FedEx # 151793240

Please Deliver To:

Dart Aerospace LTD
1270 Aberdeen
Hawkesbury, ON K6A 1K7
Canada

Customer Phone	Terms	Rep	Ship Date	Ship Via	Pkg. Type
613-632-5200	Net 30	JB	1/31/2016	FedEx 2nd Day	Box

Item	Line #	Description	Qty	U/M
120 2083	1	D4857-P, Dart Wiper Deflector	7	ea

Thank you for your business.

Total Items: 7

SHIPPING VALUE

\$4,865.00

CERTIFICATE OF CONFORMANCE (SHORT FORM CUSTOMERS ONLY)

I certify that on _____, the Carbon by Design LP furnished the supplies or services called for by the Purchase Order Above via Delivery in accordance with all applicable requirements.

I further certify that the supplies or services are of the quality specified and conform in all respects with the contract requirements, including specifications, drawings, preservation, packaging, packing, marking requirements, and physical item identification, and are in the quantity shown in this or on the attached acceptance document.

Quality: _____

Date: _____

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carbon by design

4128 Avenida De La Plata, Oceanside, CA 92056
Phone: 760-643-1300 Fax: 760-643-1333

www.carbonbydesign.com

Invoice

Date: 1/31/2016

Invoice # 19119

PO. No.: PO30938

Sales Order#: 9150

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
FedEx # 151793240

Please Ship To:

Dart Aerospace LTD
1270 Aberdeen
Hawkesbury, ON K6A 1K7
Canada

Customer Phone	Terms	Rep	Ship Date	Ship Via	Pkg. Type
613-632-5200	Net 30	JB	1/31/2016	FedEx 2nd...	Box

Item	Line #	Qty	Description	U/M	Unit Price	Amount
120.2083	1	7	D4857-P, Dart Wiper Deflector	ea	695.00	4,865.00

Thank you for your business.

Total \$4,865.00

All returns must be accompanied by a RMA #. Please call customer service at 760-643-1300 to receive a RMA number. Products damaged in shipment must be immediately documented and brought to the attention of Carbon by Design. Any products which have been installed/used are not subject to return. All returned Items, unless built to print, are subject to a 25% restocking fee. Canadian Customers are responsible for all brokerage fees, any fees not paid by the customer at the time of delivery are subject to further charges. No returns are accepted after 30 days.

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**carbon by design****CERTIFICATE OF CONFORMANCE**

PO: No.: PO30938	Description: Wiper Deflector	Inspector: DR	Packing Slip #: 19119
Customer: Dart	Drawing: D4857-M	Qty : 7	Serial Number 19119-1/19119-7

Work Requirements:

Statement of Work: See Traveler
Internal Process Doc.: See Traveler
Inspection Document: See Traveler
Manufacturing Process: Prepreg- Trapped Rubber
Security Requirement: Confidential

Approved Non-Conformances:	No	Pending SDR/ECN:	No
Disposition:	To Customer, Ship	Shipping method:	FedEx 2 nd Day

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Certification Statement: Carbon by Design LP certifies the items listed above conform to all of the applicable work and quality standard required in the purchase order listed above and any additional work requirements referenced.

All in process quality standards have been met according to customer requirements and Carbon by Design internal quality and finish requirements. All materials Certification are available for inspection and will remain on file at Carbon by Design for a period of no less than ten years.

Finished Materials/Process Specifications:

Per Drawing Requirements

Additional Quality Clauses:

Per PO Requirements, 100% Inspection

Active Quality Systems: AS 9100 Rev C, ISO9001:2008

Quality Control Representative	Title	Signature	Date
David Rodriguez	Quality Inspector	<i>David Rodriguez</i>	02/01/2016



SUBJECT:
MANUFACTURING PROCESS PROCEDURE
MANUFACTURING COMPOSITE COMPONENTS

DOCUMENT NO:
MPP-145
Rev. A
02/27/15

APPENDIX B

Layup Schedule Record

Laminator-AA01

Laminator:	Martin Mora
Location	CDD
Customer No.	P030938
Product No.	D4857-P
Serial No.	19119-1
Classified	N/A

Serial Number-AA04

Unit Serial No.	19119-1
Roll Cert.	11688/10486/9332
QA Inspection	WJ

Environment-AA02

Lab No.:	Sneaky P-Te
Lamination Start Temp.	58 ☒ °F ☐ °C
Lamination Finish Temp.	64 ☒ °F ☐ °C
Humidity	0 ☐ rising ☐ falling
Date	1-11-16 ☒ lam 1-12-16 ☒ fin

Lamination-AA05

Resin System:	☒ epoxy ☐ vinyl ester ☐ polyester ☐ phenolic ☐ flex ☐ other		
Epoxy	☐ 574A ☐ 2932A ☐ 2110A ☒ Other	Hardener	☐ 734B ☐ 974B ☐ 8992B ☒ Other
Fiber Content	40+/-2%	Type	☐ Cosmetic ☒ Structural ☐ Multi Load

Process-AA03

Process Type:	☐ open mold ☐ vac bag ☐ VARTM ☒ prepreg ☐ RTM ☐ HP Bladder		
Cure	☐ room ☐ heated ☒ oven ☐ autoclave	Tool	☐ soft ☐ carbon ☒ aluminum ☐ REN ☐ Foam
Cure Temp	260 ☒ °F ☐ °C	P.C. Temp	260 ☒ °F ☐ °C
Cure Time	4hrs	P.C. Time	4hrs
Release	☐ wax ☒ semi-perm	Degas	☒ yes ☐ no



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Layup Schedule Record

Laminator-AA01

Laminator:	Martin Mora
Location	CDD
Customer No.	P030938
Product No.	D4857-P
Serial No.	19119-2
Classified	N/A

Serial Number-AA04

Unit Serial No.	19119-2
Roll Cert.	11628/10486/9333
QA Inspection	ad

Environment-AA02

Lab No.:	Sneaky PCTE
Lamination Start Temp.	58 ☒ °F ☐ °C
Lamination Finish Temp.	62 ☒ °F ☐ °C
Humidity	0 ☐ rising ☐ falling
Date	1-12-16 ☒ lam 1-12-16 ☒ fin

Lamination-AA05

Resin System:	☒ epoxy ☐ vinyl ester ☐ polyester ☐ phenolic ☐ flex ☐ other		
Epoxy	☐ 574A ☐ 2932A ☐ 2110A ☒ Other	Hardener	☐ 734B ☐ 974B ☐ 8992B ☒ Other
Fiber Content	40+/-2 %	Type	☐ Cosmetic ☒ Structural ☐ Multi Load

Process-AA03

Process Type:	☐ open mold ☐ vac bag ☐ VARTM ☒ prepreg ☐ RTM ☐ HP Bladder		
Cure	☐ room ☐ heated ☒ oven ☐ autoclave	Tool	☐ soft ☐ carbon ☒ aluminum ☐ REN ☐ Foam
Cure Temp	260 ☒ °F ☐ °C	P.C. Temp	260 ☒ °F ☐ °C
Cure Time	460	P.C. Time	460
Release	☐ wax ☒ semi-perm	Degas	☒ yes ☐ no



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Layup Schedule Record

Laminator-AA01

Laminator:	Martin Mora
Location	CBD
Customer No.	D030938
Product No.	D4857-P
Serial No.	19119-3
Classified	N/A

Serial Number-AA04

Unit Serial No.	19119-3
Roll Cert.	11688/9223/10486
QA Inspection	gdm

Environment-AA02

Lab No.:	Sucaty Pete
Lamination Start Temp.	60 ☒ °F ☐ °C
Lamination Finish Temp.	64 ☒ °F ☐ °C
Humidity	0 ☒ rising ☐ falling
Date	1-13-16 ☒ lam 1-14-16 ☒ fin

Lamination-AA05

Resin System:	☒ epoxy ☐ vinyl ester ☐ polyester ☐ phenolic ☐ flex ☐ other		
Epoxy	☐ 574A ☐ 2932A ☐ 2110A ☒ Other	Hardener	☐ 734B ☐ 974B ☐ 8992B ☒ Other
Epoxy Content	40+/-2%	Type	☐ Cosmetic ☒ Structural ☐ Multi Load

2-1-16

Process-AA03

Process Type:	☐ open mold ☐ vac bag ☐ VARTM ☒ prepreg ☐ RTM ☐ HP Bladder		
Cure	☐ room ☐ heated ☒ oven ☐ autoclave	Tool	☐ soft ☐ carbon ☒ aluminum ☐ REN ☐ Foam
Cure Temp	260 ☒ °F ☐ °C	P.C. Temp	260 ☒ °F ☐ °C
Cure Time	4hrs	P.C. Time	4hrs
Release	☐ wax ☒ semi-perm	Degas	☒ yes ☐ no



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Layup Schedule Record

Laminator-AA01

Laminator:	Martin Mora
Location	CBD
Customer No.	P030938
Product No.	D4857-P
Serial No.	19119-4
Classified	N/A

Serial Number-AA04

Unit Serial No.	19119-4
Roll Cert.	11688/9322/10486
QA Inspection	WJL

Environment-AA02

Lab No.:	Sneaky Pete
Lamination Start Temp.	60 ☒ °F ☐ °C
Lamination Finish Temp.	65 ☒ °F ☐ °C
Humidity	Ø ☐ rising ☐ falling
Date	1-14-16 ☒ lam 1-15-16 ☒ fin

Lamination-AA05

Resin System:	☒ epoxy ☐ vinyl ester ☐ polyester ☐ phenolic ☐ flax ☐ other	
Epoxy	☐ 574A ☐ 2932A ☐ 2110A ☒ Other	Hardener ☐ 734B ☐ 974B ☐ 8992B ☒ Other
Fiber Content	40 +/- 2 %	Type ☐ Cosmetic ☒ Structural ☐ Multi Load

WJL-1-16

Process-AA03

Process Type:	☐ open mold ☐ vac bag ☐ VARTM ☒ prepreg ☐ RIM ☐ HP-Bladder		
Cure	☐ room ☐ heated ☒ oven ☐ autoclave	Tool	☐ soft ☐ carbon ☒ aluminum ☐ REN ☐ Foam
Cure Temp	260 ☒ °F ☐ °C	P.C. Temp	260 ☒ °F ☐ °C
Cure Time	465	P.C. Time	465
Release	☐ wax ☒ semi-perm	Degas	☒ yes ☐ no



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Layup Schedule Record

Laminator-AA01

Laminator:	Martin Mora
Location	CBD
Customer No.	PO30938
Product No.	D4857-P
Serial No.	19119-5
Classified	N/A

Serial Number-AA04

Unit Serial No.	19119-5
Roll Cert.	11698/9333/10486
QA Inspection	WJ

Environment-AA02

Lab No.:	Sneaky Pete
Lamination Start Temp.	61 ☒ °F ☐ °C
Lamination Finish Temp.	64 ☒ °F ☐ °C
Humidity	Q ☐ rising ☐ falling
Date	1-15-16 ☒ lam 1-18-16 ☒ fin

Lamination-AA05

Resin System:	☒ epoxy ☐ vinyl ester ☐ polyester ☐ phenolic ☐ flex ☐ other		
Epoxy	☐ 574A ☐ 2932A ☐ 2110A ☒ Other	Hardener	☐ 734B ☐ 974B ☐ 8992B ☒ Other
Fiber Content	40 +/- 2 %	Type	☐ Cosmetic ☒ Structural ☐ Multi Load

WJ 2-1-16

Process-AA03

Process Type:	☐ open mold ☐ vac bag ☐ VARTM ☒ prepreg ☐ RTM ☐ HP Bladder		
Cure	☐ room ☐ heated ☒ oven ☐ autoclave	Tool	☐ soft ☐ carbon ☒ aluminum ☐ REN ☐ Foam
Cure Temp	260 ☒ °F ☐ °C	P.C. Temp	260 ☒ °F ☐ °C
Cure Time	4 hrs	P.C. Time	4 hrs
Release	☐ wax ☒ semi-perm	Degas	☒ yes ☐ no



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Layup Schedule Record

Laminator-AA01

Laminator:	Martin Wong
Location	CBD
Customer No.	P030938
Product No.	D4857-P
Serial No.	19119-6
Classified	N/A

Serial Number-AA04

Unit Serial No.	19119-6
Roll Cert.	11688/9333/10486
QA Inspection	✓

Environment-AA02

Lab No.:	Sneaky Pete
Lamination Start Temp.	60 ☒ °F ☐ °C
Lamination Finish Temp.	63 ☒ °F ☐ °C
Humidity	8 ☐ rising ☐ falling
Date	1-18-16 ☒ lam 1-19-16 ☒ fin

Lamination-AA05

Resin System:	☒ epoxy ☐ vinyl ester ☐ polyester ☐ phenolic ☐ flex ☐ other	
Epoxy	☐ 574A ☐ 2932A ☐ 2110A ☒ Other	Hardener ☐ 734B ☐ 974B ☐ 8992B ☒ Other
Fiber Content	40+/-2 %	Type ☐ Cosmetic ☒ Structural ☐ Multi Load

4/2-1-16

Process-AA03

Process Type:	☐ open mold ☐ vac bag ☐ VARTM ☒ prepreg ☐ RTM ☐ HP Bladder	
Cure	☐ room ☐ heated ☒ oven ☐ autoclave	Tool ☐ soft ☐ carbon ☒ aluminum ☐ REN ☐ Foam
Cure Temp	260 ☒ °F ☐ °C	P.C. Temp 260 ☒ °F ☐ °C
Cure Time	463	P.C. Time 463
Release	☐ wax ☒ semi-perm	Degas ☒ yes ☐ no



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Layup Schedule Record

Laminator-AA01

Laminator:	Martin Mora
Location	CDD
Customer No.	PO 30938
Product No.	D4857-P
Serial No.	19119-7
Classified	N/A

Serial Number-AA04

Unit Serial No.	19119-7
Roll Cert.	11688/933/10486
QA Inspection	WS

Environment-AA02

Lab No.:	Sneaky Pete
Lamination Start Temp.	60 ☒ °F ☐ °C
Lamination Finish Temp.	62 ☒ °F ☐ °C
Humidity	0 ☐ rising ☐ falling
Date	1-19-16 ☒ lam 1-20-16 ☒ fin

Lamination-AA05

Resin System:	☒ epoxy ☐ vinyl ester ☐ polyester ☐ phenolic ☐ flex ☐ other	
Epoxy	☐ 574A ☐ 2932A ☐ 2110A ☒ Other	Hardener ☐ 734B ☐ 974B ☐ 8992B ☒ Other
Fiber Content	40-42 %	Type ☐ Cosmetic ☒ Structural ☐ Multi Load

Process-AA03

Process Type:	☐ open mold ☐ vac bag ☐ VARTM ☒ prepreg ☐ RTM ☐ HP Bladder	
Cure	☐ room ☐ heated ☒ oven ☐ autoclave	Tool ☐ soft ☐ carbon ☒ aluminum ☐ REN ☐ Foam
Cure Temp	260 ☒ °F ☐ °C	P.C. Temp 260 ☒ °F ☐ °C
Cure Time	4hrs	P.C. Time 4hrs
Release	☐ wax ☒ semi-perm	Degas ☒ yes ☐ no

DART

AEROSPACE

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Appendix B – Layup Schedule Record

LAYER	Material	Material Size	0°	90°	45°	-45°	LAYER	Material	Material Size	0°	90°	45°	-45°
LAYER 1	☒ Carbon	x	☒ 0°	☒ 90°	☒ 45°	☒ -45°	LAYER 7	☒ Carbon	x	☒ 0°	☒ 90°	☒ 45°	☒ -45°
	☒ Kevlar		☒ dry	☒ pre	☒ dry	☒ pre		☒ Kevlar		☒ dry	☒ pre	☒ dry	☒ pre
	☒ S2 Glass							☒ S2 Glass					
	☒ E Glass							☒ E Glass					
LAYER 2	☒ Twill 2x2	x	☒ 3k	☒ 12k	☒ dry	☒ pre	LAYER 8	☒ Twill 2x2	x	☒ 3k	☒ 12k	☒ dry	☒ pre
	☒ Uni		☒ 3k	☒ 12k	☒ dry	☒ pre		☒ Uni		☒ 3k	☒ 12k	☒ dry	☒ pre
	☒ 5HS		☒ 3k	☒ 12k	☒ dry	☒ pre		☒ 5HS		☒ 3k	☒ 12k	☒ dry	☒ pre
LAYER 3	☒ Carbon	x	☒ 0°	☒ 90°	☒ 45°	☒ -45°	LAYER 9	☒ Carbon	x	☒ 0°	☒ 90°	☒ 45°	☒ -45°
	☒ Kevlar		☒ dry	☒ pre	☒ dry	☒ pre		☒ Kevlar		☒ dry	☒ pre	☒ dry	☒ pre
	☒ S2 Glass							☒ S2 Glass					
	☒ E Glass							☒ E Glass					
LAYER 4	☒ Twill 2x2	x	☒ 3k	☒ 12k	☒ dry	☒ pre	LAYER 10	☒ Twill 2x2	x	☒ 3k	☒ 12k	☒ dry	☒ pre
	☒ Uni		☒ 3k	☒ 12k	☒ dry	☒ pre		☒ Uni		☒ 3k	☒ 12k	☒ dry	☒ pre
	☒ 5HS		☒ 3k	☒ 12k	☒ dry	☒ pre		☒ 5HS		☒ 3k	☒ 12k	☒ dry	☒ pre
LAYER 5	☒ Carbon	x	☒ 0°	☒ 90°	☒ 45°	☒ -45°	LAYER 11	☒ Carbon	x	☒ 0°	☒ 90°	☒ 45°	☒ -45°
	☒ Kevlar		☒ dry	☒ pre	☒ dry	☒ pre		☒ Kevlar		☒ dry	☒ pre	☒ dry	☒ pre
	☒ S2 Glass							☒ S2 Glass					
	☒ E Glass							☒ E Glass					
LAYER 6	☒ Twill 2x2	x	☒ 3k	☒ 12k	☒ dry	☒ pre	LAYER 12	☒ Twill 2x2	x	☒ 3k	☒ 12k	☒ dry	☒ pre
	☒ Uni		☒ 3k	☒ 12k	☒ dry	☒ pre		☒ Uni		☒ 3k	☒ 12k	☒ dry	☒ pre
	☒ 5HS		☒ 3k	☒ 12k	☒ dry	☒ pre		☒ 5HS		☒ 3k	☒ 12k	☒ dry	☒ pre

DART

AEROSPACE

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LAYER 1	☐ Carbon	<u>Material Size</u> x	☐ 0°	LAYER 7	☐ Carbon	<u>Material Size</u> x	☐ 0°
	☒ Kevlar		☒ 90°		☒ Kevlar		☒ 90°
	☐ S2 Glass		☐ 45°		☐ S2 Glass		☐ 45°
	☐ E Glass		☐ -45°		☐ E Glass		☐ -45°
	☒ Twill 2x2	☐ 3k ☐ 12k	☐ dry ☒ pre		☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre
	☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre
	☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre
LAYER 2	☐ Carbon	<u>Material Size</u> x	☐ 0°	LAYER 8	☐ Carbon	<u>Material Size</u> x	☐ 0°
	☒ Kevlar		☒ 90°		☒ Kevlar		☒ 90°
	☐ S2 Glass		☐ 45°		☐ S2 Glass		☐ 45°
	☐ E Glass		☐ -45°		☐ E Glass		☐ -45°
	☒ Twill 2x2	☐ 3k ☐ 12k	☐ dry ☒ pre		☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre
	☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre
	☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre
LAYER 3	☒ Carbon	<u>Material Size</u> x	☐ 0°	LAYER 9	☒ Carbon	<u>Material Size</u> x	☐ 0°
	☐ Kevlar		☒ 90°		☐ Kevlar		☒ 90°
	☐ S2 Glass		☐ 45°		☐ S2 Glass		☐ 45°
	☐ E Glass		☐ -45°		☐ E Glass		☐ -45°
	☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre		☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre
	☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre
	☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre
LAYER 4	☒ Carbon	<u>Material Size</u> x	☐ 0°	LAYER 10	☒ Carbon	<u>Material Size</u> x	☐ 0°
	☐ Kevlar		☒ 90°		☐ Kevlar		☒ 90°
	☐ S2 Glass		☐ 45°		☐ S2 Glass		☐ 45°
	☐ E Glass		☐ -45°		☐ E Glass		☐ -45°
	☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre		☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre
	☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre
	☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre
LAYER 5	☒ Carbon	<u>Material Size</u> x	☐ 0°	LAYER 11	☒ Carbon	<u>Material Size</u> x	☐ 0°
	☐ Kevlar		☒ 90°		☐ Kevlar		☒ 90°
	☐ S2 Glass		☐ 45°		☐ S2 Glass		☐ 45°
	☐ E Glass		☐ -45°		☐ E Glass		☐ -45°
	☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre		☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre
	☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre
	☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre
LAYER 6	☒ Carbon	<u>Material Size</u> x	☐ 0°	LAYER 12	☒ Carbon	<u>Material Size</u> x	☐ 0°
	☐ Kevlar		☒ 90°		☐ Kevlar		☒ 90°
	☐ S2 Glass		☐ 45°		☐ S2 Glass		☐ 45°
	☐ E Glass		☐ -45°		☐ E Glass		☐ -45°
	☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre		☒ Twill 2x2	☒ 3k ☐ 12k	☐ dry ☒ pre
	☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ Uni	☐ 3k ☐ 12k	☐ dry ☐ pre
	☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre		☐ 5HS	☐ 3k ☐ 12k	☐ dry ☐ pre



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LAYER 13	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☒ 0° ☒ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre	LAYER 20	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☐ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre
LAYER 14	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☒ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre	LAYER 21	☐ Carbon ☐ Kevlar ☐ S2 Glass ☒ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☐ 0° ☒ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre
LAYER 15	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☒ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre	LAYER 22	☐ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☐ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☐ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☐ pre ☐ dry ☐ pre ☐ dry ☐ pre
LAYER 16	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☒ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre	LAYER 23	☐ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☐ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☐ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☐ pre ☐ dry ☐ pre ☐ dry ☐ pre
LAYER 17	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☒ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre	LAYER 24	☐ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☐ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☐ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☐ pre ☐ dry ☐ pre ☐ dry ☐ pre
LAYER 18	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☒ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre	LAYER 25	☐ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☐ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☐ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☐ pre ☐ dry ☐ pre ☐ dry ☐ pre
LAYER 19	☒ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☒ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☒ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☒ pre ☐ dry ☐ pre ☐ dry ☐ pre	LAYER 26	☐ Carbon ☐ Kevlar ☐ S2 Glass ☐ E Glass ☐ Twill 2x2 ☐ Uni ☐ 5HS	Material Size x	☐ 0° ☐ 90° ☐ 45° ☐ -45° ☐ dry ☐ pre ☐ dry ☐ pre ☐ dry ☐ pre

CERTIFICATE OF CONFORMANCE

Aldila Composite Materials hereby certifies that the materials or parts referenced below conform to all applicable requirements and specifications per the customer purchase order as noted. Any exception shall be itemized.

CUSTOMER	CARBON BY DESIGN
CUSTOMER PO NUMBER	9333
ACM SO NUMBER	501015
PRODUCT	120-AR250C-107/42 (1SP), 50"
CUSTOMER PART#	550.0140
ACM ITEM #	060937
BATCH	15-0121
ROLLS	1
TOTAL QUANTITY	310.0 LFT, 1292 SF
MFG DATE	2/5/2015
SHIPMENT DATE	2/10/2015
WARRANTY	at 0°F FOR 12 MONTHS
EXPIRATION DATE	2/5/2016

QUALITY ASSURANCE REPRESENTATIVE:

NAME: FREDERICK F. SAREMI

SIGNATURE:  DATE: 2/10/2015

CERTIFICATE OF CONFORMANCE

Aldila Composite Materials hereby certifies that the materials or parts referenced below conform to all applicable requirements and specifications per the customer purchase order as noted. Any exception shall be itemized.

CUSTOMER	CARBON BY DESIGN
CUSTOMER PO NUMBER	10486
ACM SO NUMBER	501290
PRODUCT	3K2X2-FR250B-204/40 (2SP), 50"
CUSTOMER PART#	602.0001
ACM ITEM #	076903
BATCH	15-1170
ROLLS	1, 2
TOTAL QUANTITY	273 LFT, 1138 SF
MFG DATE	10/13/2015
SHIPMENT DATE	10/19/2015
WARRANTY	at 0°F FOR 6 MONTHS
EXPIRATION DATE	4/10/2016

QUALITY ASSURANCE REPRESENTATIVE:

NAME: FREDERICK F. SAREMI

SIGNATURE: 

DATE: 10/19/2015



2320 Pullman St.
Santa Ana, CA 92705

(949) 623-4400 Ph.
(949) 261-6009 Fx.

CERTIFICATE OF CONFORMANCE

- SECOND RECERTIFICATION -

CUSTOMER: CARBON BY DESIGN

Purchase Order Number: 9453

Sales Order Number: 11688

Product: AX-4112-285-50" RC38

Description: High Toughness, Flame Retardant

Description (ctd): Epoxy Aramid Prepreg

Batch Number: 91

Recertification Date: 12/3/2015

Warranty Expiration Date: 3/3/2016

Date of Manufacture: 2/17/2015

Storage Temperature: 40°F or below

Sales Order Quantity: 100 yd

Production Quantity: 100 yd

Test Report

Test	Requirement	Result	Test Method
Weight/psf	0.056 +/- 0.003	.054	ATS-001
Volatiles/%	Report	1.808	ATS-002
Gel Time/second	Report	287	ATS-003
Flow/%	Report	4.241	ATS-004
Resin Content/%	38 +/- 4	35.088	ATS-005
Production Standard	Requirement		Test Method
Visual Inspection	Pass	Pass	ATS-013
Tack Level / Number	Medium / 3	Medium / 3	ATS-015
Nominal Core Diameter	6"	6"	ATS-013
Sides Coated	Two	Two	ATS-013
Color	Natural	Natural	ATS-013
Liner Configuration	White Paper / 2.5 mil Red Poly	White Paper / 2.5 mil Red Poly	ATS-013

This document certifies material supplied to this order to the following requirements:

Purchase order terms and conditions

Axiom Test Standards (where applicable)

All terms and conditions of the Purchase Order Agreement

Specifications as noted below

Specification(s):

Axiom Test Standard

Recertified in accordance with:

Axiom Materials Quality Procedure AQP-020

Customer Purchase Order No. 10667

Sales Order No. 14581



Digitally signed by
Edwin Martin
Date: 2015.12.03
11:48:04 -08'00'

Signature of Authorized Agent

F-751-1 Rev A

PRC-DeSoto International, Inc.

PPG Aerospace - Deft
17451 VON KARMAN AVE, IRVINE,
CA 92614-6295
Phone No.: (800) 544-3338 or
(949) 474-0400

Certificate of Conformance

Pick List: P454476

Cust No.: 771015
Bill-To: 771015B09
PRC ASC LOS ANGELES
Do not mail invoices:
aerospace_apinvoices@ppg.com
roxanne.rowe@ppg.com
CA 91342 USA
Phone: 818/549-7726
Ship-To: 7710150467
CARBON BY DESIGN
4128 AVENIDA DE LA PLATA
OCEANSIDE, CA 92056 USA
Phone:

Branch: BINT
Sales Order No.: S 7623
Total Cartons: .00

Customer P.O.: LAD11085

Contract/Credit Auth
Number:

Mark For: FX ACCT# 573438523
CSR: JSR



Remarks:

Order Date	Ship Date	Terms	Freight Terms	Freight	Service Rep
01/20/2015	01/22/2015	Net 30 Days	Freight Collect	Fedex Freight	ValleryR
Line	Order Qty	Product	Description / Reference Number	UOM	Pick Qty
1	8	44GN098 1GK	MIL-PRF-85582E, TYPE I, CLASS N, 1-STEP MIX GALLON KIT LMA-MR003E TYPE II CLASS 2 GRADE A; 5PTMRT09C GRADE B; H MS 15-1100 TYPE I CLASS 2 GRADE N; PWA 36515C-3 and FMS 3027C FORM 3 P/N: DE44GN098XZZG2ST	EA	8
Customer PO: 9312			Lot Number: 102728/102729	8	
DOM: June 2014DOE: 6/2016			DOM of Repack:	DOE of Repack:	
Total Cartons:					.00

Picked By: _____

Checked By: _____

1

1/21/2015

PPG Aerospace/PRC DeSoto International certifies that the above materials have been manufactured, tested and conforms to all requirements in accordance with applicable specifications. All test data pertaining to batch acceptance requirements defined by the specification for this material is on file and available for inspection upon request. For Non-US PPG Customers, we can only offer Technical Data/Test Reports for any ITAR or EAR restricted specifications with valid US export authorization

Christopher Tafel - Quality Assurance Specialist